

# Service Manual

for seca 709 CN / 710 CN

Service Manual Number

**17-05-01-324-a** Valid as of: 12.01.2006

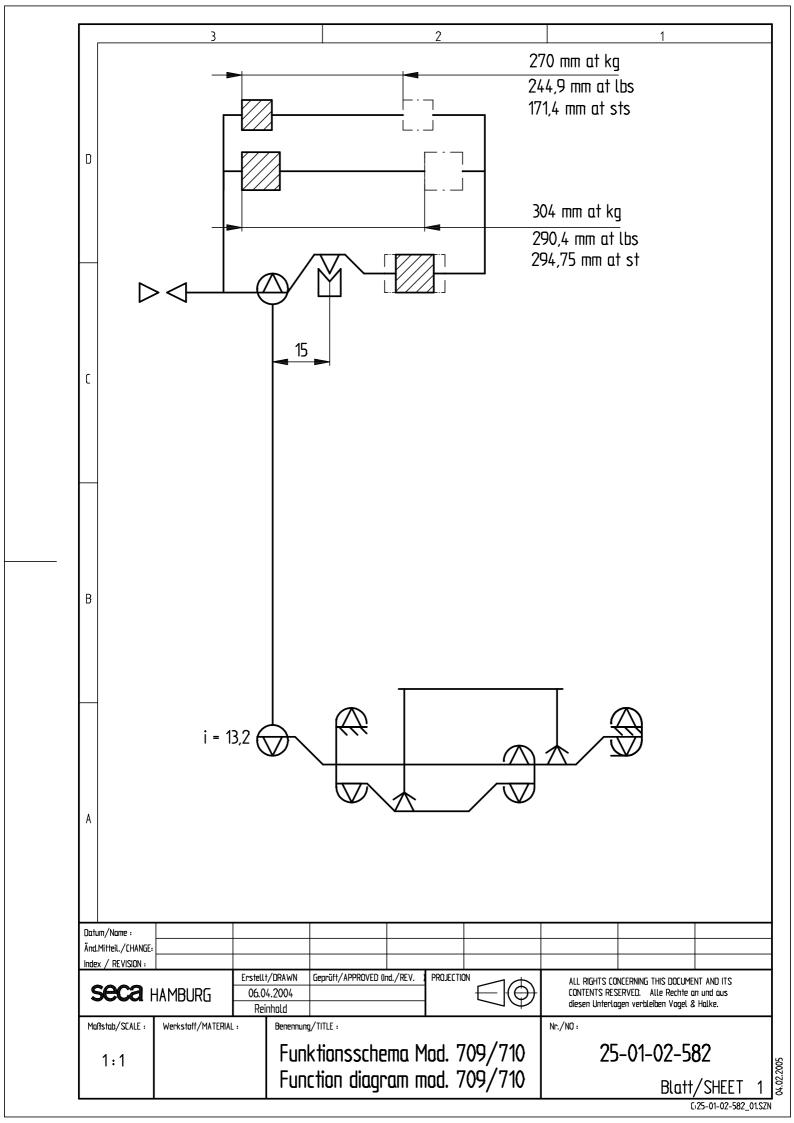
Description:

mechanical column scale with sliding weights

# Content:

Operation mod. 709	17-10-07-493	b
Operation mod. 710	17-10-06-298	b
Function diagram	25-01-02-582	
Calibration	30-05-00-249	
spare parts beam hood	30-05-00-250	а
Spare parts baseframe	30-02-00-204	а

Manual number: 17-05-01-324-a



#### seca 719/720

Drawing related to calibration instructions 30-05-00-249 Page 2

#### 1. Sensitivity

The sensitivity is changed by adjusting the height of the counterweight (A), i.e. the fixing screws for the counterweight (A) are fitted with spacer plates. Take out or increase the number of spacer plates (A1) to change the sensitivity.

- Move the counterweight (A) up: the scale's sensitivity is increased.
- Move the counterweight (A) down: the scale's sensitivity is reduced.

#### 2. Large sliding weight 0-190 kg (B)

- Set all weights to zero.
- Place a certain amount of lead on the scale's zero point.

Use the taring spindle (C) to tare out the scale.

Position the large sliding weight (B) at 190 kg (400lbs /29 sts).

Place 190 kg (400lbs /29 sts) on the platform.

Distribute the amount of lead placed on the zero point - certain amount at 0 kg, certain amount at 190 kg - (400lbs /29 sts) until the hood has reached an equilibrium.

The lead positioned at 190 kg (400lbs /29 sts) must be placed in one of the empty chambers (B1) of the large sliding weight (B).

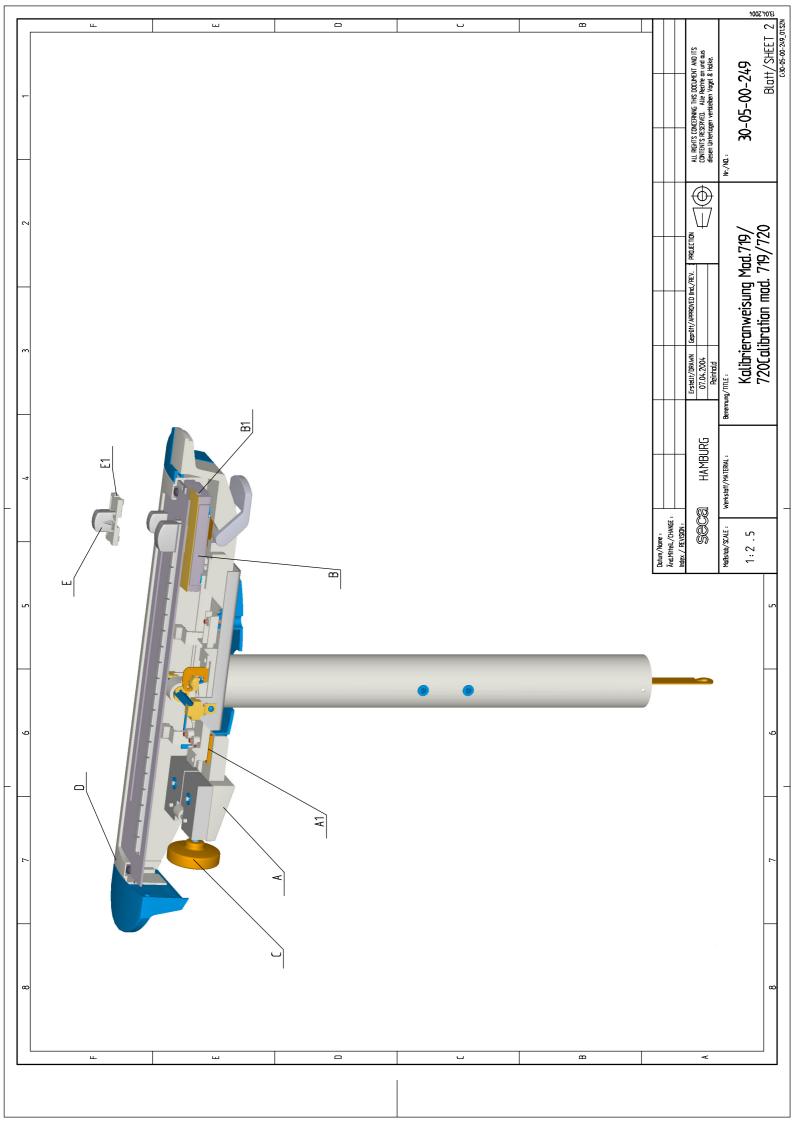
The lead positioned at 0 kg/lbs/sts is not required.

#### 2.2 Large sliding weight (B) too heavy

- A certain amount of lead must be drilled out of the empty chamber of the large sliding weight (B).

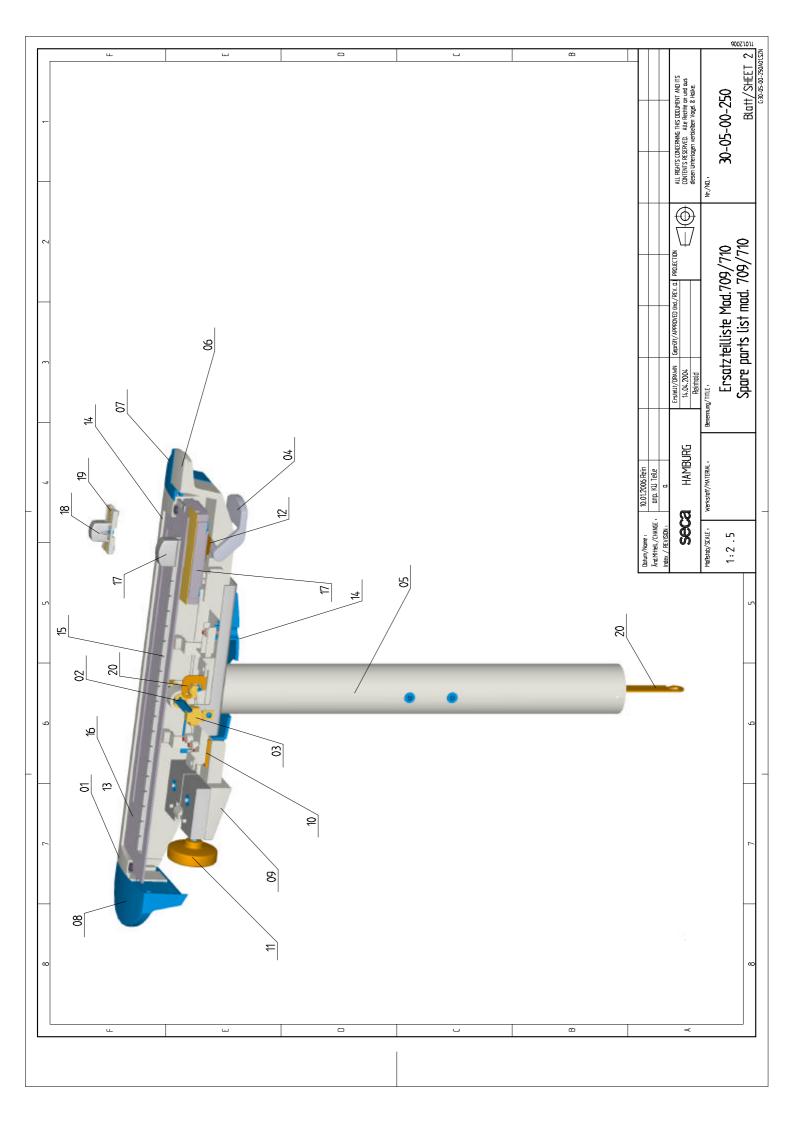
## 3. Small sliding weight (E) is not correct

- Add lead or shorten the lead seal to establish the equilibrium in the existing chamber (E1). Please proceed as described for steps 2.1 and 2.2.



# seca 709 / 710 Beam hood

05-01-01-014-602         Sliding poise device, non calibrated         40           02         05-10-01-019-009         Beam lever compl.         35           03         01-03-04-248-009         Cap for beam lever         10           04         05-05-01-234-816         Locking lever         25           05         04-02-06-036-807         Bottom part for sliding poise device         30           06         05-04-02-209-816         Pointer         15           07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-245-807         Beam hood         30           15         05-03-01-437-009         Scale support kg         28           05-03-01-439-009         Scale support lbs         28           05-03-01-439-009	Item	Articel no.	Designation	Price stage
05-01-01-014-602         Sliding poise device, non calibrated         40           02         05-10-01-019-009         Beam lever compl.         35           03         01-03-04-248-009         Cap for beam lever         10           04         05-05-01-234-816         Locking lever         25           05         04-02-06-036-807         Bottom part for sliding poise device         30           06         05-04-02-209-816         Pointer         15           07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-245-807         Beam hood         30           15         05-03-01-437-009         Scale support kg         28           05-03-01-439-009         Scale support lbs         28           05-03-01-439-009	01	05-01-01-014-601	Sliding poise device, calibrated	40
03         01-03-04-248-009         Cap for beam lever         10           04         05-05-01-234-816         Locking lever         25           05         04-02-06-036-807         Bottom part for sliding poise device         30           06         05-04-02-209-816         Pointer         15           07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-245-807         Beam hood         30           15         05-03-01-441-009         Scale support kg         28           05-03-01-442-009         Scale support kg         28           05-03-01-439-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-439-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-449-009			•	40
04         05-05-01-234-816         Locking lever         25           05         04-02-06-036-807         Bottom part for sliding poise device         30           06         05-04-02-209-816         Pointer         15           07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-243-009         Cover, underside         15           15         05-03-01-437-009         Scale support kg         28           05-03-01-4440-009         Scale support bs         28           05-03-01-443-009         Scale support sts         28           16         05-03-01-434-009         Scale plate kg, mod. 709 callibrated         15           05-03-01-438-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-440-009 <td>02</td> <td>05-10-01-019-009</td> <td>Beam lever compl.</td> <td>35</td>	02	05-10-01-019-009	Beam lever compl.	35
05         04-02-06-036-807         Bottom part for sliding poise device         30           06         05-04-02-209-816         Pointer         15           07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-243-807         Beam hood         30           14         05-06-02-243-009         Cover, underside         15           15         05-03-01-437-009         Scale support kg         28           05-03-01-444-009         Scale support lbs         28           05-03-01-444-009         Scale support bls         28           05-03-01-438-009         Scale plate kg, mod. 710 non calibrated         15           16         05-03-01-438-009         Scale plate lbs, mod. 710 non calibrated         15           05-03-01-440-009         Scale plate lbs, mod. 710 non calibrated         15           05-03-01-	03	01-03-04-248-009	Cap for beam lever	10
06         05-04-02-209-816         Pointer         15           07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-243-009         Cover, underside         15           15         05-03-01-437-009         Scale support kg         28           05-03-01-441-009         Scale support lbs         28           05-03-01-442-009         Scale plate kg, mod. 709 calibrated         15           16         05-03-01-438-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-439-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-440-009         Scale plate sts, mod. 710 non calibrated         15           17         01-20-14-019-009         Sliding weight, big         15           18	04	05-05-01-234-816	Locking lever	25
07         05-04-01-206-009         Counter pointer         06           08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-243-009         Cover, underside         15           15         05-03-01-437-009 05-03-01-441-009         Scale support kg Scale support lbs Scale support lbs Scale support sts         28           16         05-03-01-434-009 05-03-01-438-009 05-03-01-439-009 Scale plate kg, mod. 709 calibrated 05-03-01-439-009 Scale plate lbs, mod. 710 non calibrated 05-03-01-439-009 Scale plate sts, mod. 710 non calibrated 05-03-01-40-009         15           17         01-20-14-019-009 01-20-14-249-009         Sliding weight, big         33           18         01-20-14-018-009 01-20-14-246-009         Sliding weight, small Sliding knop for sliding weight, big         15           19         01-07-05-294-009         Slip spring         06	05	04-02-06-036-807	Bottom part for sliding poise device	30
08         05-04-01-207-009         Side cap         06           09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-243-009         Cover, underside         15           15         05-03-01-437-009         Scale support kg         28           05-03-01-441-009         Scale support lbs         28           05-03-01-442-009         Scale support sts         28           16         05-03-01-434-009         Scale plate kg, mod. 709 calibrated         15           05-03-01-439-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-440-009         Scale plate lbs, mod. 710 non calibrated         15           17         01-20-14-019-009         Sliding weight, big         33           18         01-20-14-018-009         Sliding knop for sliding weight, big         15           18         01-20-14-246-009         Sliding knop for sliding weight, big         15	06	05-04-02-209-816	Pointer	15
09         01-20-14-020-009         Counter weight compl.         26           10         01-20-14-252-009         Distance plate         10           11         01-20-13-003-816         Taring knop         25           12         01-07-05-295-009         Spring plate         01           13         05-06-02-245-807         Beam hood         30           14         05-06-02-243-009         Cover, underside         15           15         05-03-01-437-009         Scale support kg         28           05-03-01-447-009         Scale support lbs         28           05-03-01-444-009         Scale support sts         28           16         05-03-01-438-009         Scale plate kg, mod. 709 calibrated         15           05-03-01-439-009         Scale plate kg, mod. 710 non calibrated         15           05-03-01-439-009         Scale plate lbs, mod. 710 non calibrated         15           05-03-01-449-009         Sliding weight, big         33           17         01-20-14-019-009         Sliding weight, small         23           18         01-20-14-018-009         Sliding weight, small         23           19         01-07-05-294-009         Slip spring         06	07	05-04-01-206-009	Counter pointer	06
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11 01-20-13-003-816 Taring knop 25  12 01-07-05-295-009 Spring plate 01  13 05-06-02-245-807 Beam hood 30  14 05-06-02-243-009 Cover, underside 15  15 05-03-01-437-009 Scale support kg 28 05-03-01-441-009 Scale support lbs 28 05-03-01-442-009 Scale support sts 28  16 05-03-01-438-009 Scale plate kg, mod. 709 calibrated 15 05-03-01-438-009 Scale plate kg, mod. 710 non calibrated 15 05-03-01-439-009 Scale plate lbs, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 17 01-20-14-019-009 Sliding weight, big 33 01-20-14-249-009 Sliding weight, big 15  18 01-20-14-018-009 Sliding weight, small 23 01-20-14-246-009 Sliding knop for sliding weight, big 15	09	01-20-14-020-009	Counter weight compl.	26
12 01-07-05-295-009 Spring plate 01 13 05-06-02-245-807 Beam hood 30 14 05-06-02-243-009 Cover, underside 15 15 05-03-01-437-009 Scale support kg 28 05-03-01-441-009 Scale support lbs 28 05-03-01-442-009 Scale support sts 28 16 05-03-01-438-009 Scale plate kg, mod. 709 calibrated 15 05-03-01-438-009 Scale plate kg, mod. 710 non calibrated 15 05-03-01-439-009 Scale plate lbs, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 05-03-01-440-009 Scale plate sts, mod. 710 non calibrated 15 05-03-01-440-009 Sliding weight, big 33 01-20-14-249-009 Sliding knop for sliding weight, big 15 18 01-20-14-246-009 Sliding knop for sliding weight, big 15	10	01-20-14-252-009	Distance plate	10
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15	13	05-06-02-245-807	Beam hood	30
05-03-01-441-009       Scale support lbs       28         05-03-01-442-009       Scale support sts       28         16       05-03-01-434-009       Scale plate kg, mod. 709 calibrated       15         05-03-01-438-009       Scale plate kg, mod. 710 non calibrated       15         05-03-01-439-009       Scale plate lbs, mod. 710 non calibrated       15         05-03-01-440-009       Scale plate sts, mod. 710 non calibrated       15         17       01-20-14-019-009       Sliding weight, big       33         01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009       Sliding weight, small       23         01-20-14-246-009       Sliding knop for sliding weight, big       15         19       01-07-05-294-009       Slip spring       06	14	05-06-02-243-009	Cover, underside	15
05-03-01-442-009       Scale support sts       28         16       05-03-01-434-009       Scale plate kg, mod. 709 calibrated       15         05-03-01-438-009       Scale plate kg, mod. 710 non calibrated       15         05-03-01-439-009       Scale plate lbs, mod. 710 non calibrated       15         05-03-01-440-009       Scale plate sts, mod. 710 non calibrated       15         17       01-20-14-019-009       Sliding weight, big       33         01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009       Sliding weight, small       23         01-20-14-246-009       Sliding knop for sliding weight, big       15         19       01-07-05-294-009       Slip spring       06	15	05-03-01-437-009	Scale support kg	28
16				
05-03-01-438-009       Scale plate kg, mod. 710 non calibrated       15         05-03-01-439-009       Scale plate lbs, mod. 710 non calibrated       15         05-03-01-440-009       Scale plate sts, mod. 710 non calibrated       15         17       01-20-14-019-009       Sliding weight, big       33         01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009       Sliding weight, small       23         01-20-14-246-009       Sliding knop for sliding weight, big       15         19       01-07-05-294-009       Slip spring       06		05-03-01-442-009	Scale support sts	28
05-03-01-438-009       Scale plate kg, mod. 710 non calibrated       15         05-03-01-439-009       Scale plate lbs, mod. 710 non calibrated       15         05-03-01-440-009       Scale plate sts, mod. 710 non calibrated       15         17       01-20-14-019-009       Sliding weight, big       33         01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009       Sliding weight, small       23         01-20-14-246-009       Sliding knop for sliding weight, big       15         19       01-07-05-294-009       Slip spring       06	16	05-03-01-434-009	Scale plate kg, mod. 709 calibrated	15
05-03-01-439-009       Scale plate lbs, mod. 710 non calibrated       15         05-03-01-440-009       Scale plate sts, mod. 710 non calibrated       15         17       01-20-14-019-009       Sliding weight, big       33         01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009       Sliding weight, small       23         01-20-14-246-009       Sliding knop for sliding weight, big       15         19       01-07-05-294-009       Slip spring       06		05-03-01-438-009		15
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01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009		05-03-01-440-009	Scale plate sts, mod. 710 non calibrated	15
01-20-14-249-009       Sliding knop for sliding weight, big       15         18       01-20-14-018-009	17	01-20-14-019-009	Sliding weight, big	33
01-20-14-246-009 Sliding knop for sliding weight, big 15  19 01-07-05-294-009 Slip spring 06	-			15
01-20-14-246-009 Sliding knop for sliding weight, big 15  19 01-07-05-294-009 Slip spring 06	18	01-20-14-018-009	Sliding weight, small	23
			Sliding knop for sliding weight, big	
20 01-02-05-025-009 Tie rod column 17	19	01-07-05-294-009	Slip spring	06
	20	01-02-05-025-009	Tie rod column	17



Service Manual Sparepartslist

## seca 700 / 709 / 710 / 711 / 755 / 756 Baseframe

## New mechanical column scales CN

Item	Articel no.	Designation	price stage
01	02-02-03-107-807	Frame compl. non-calibrated with wheel, adjusting foot, cap	41
	02-02-03-108-807	frame compl. calibrated. with wheel, adjusting foot, cap, bubble level	41
02	01-17-01-204-009	Bubble level only calibrated models	15
	01-13-05-398-807	Cap only non-calibrated models	01
03	01-10-04-221-009	Levelling device	15
04	01-13-05-397-816	Threaded plug levelling device	05
05	02-02-03-291-816	Column connection	26
	02-02-03-295-816	Blind for column connection oval	20
06	01-13-05-399-816	Cap column connection	01
07	01-12-02-002-009	Roller compl. with axle and holder	20
08	01-01-06-089-009	Cross bar compl. for all models	15
09	01-01-01-069-009	Corner attachment	10
10	02-06-03-057-009	Lever set comp. non-calibrated	35
	02-06-03-058-009	Lever set comp. calibrated	35
11	01-04-07-215-009	Lever guide	10
12	01-03-03-269-009	Securing plate for lever	10
13	01-01-03-221-009	Centre suspension	10
14	04-02-06-034-807	Lower column 700/711	25
	04-02-06-037-807	Lower column 709/710	25
	04-02-06-041-807	Column kompl. 755/756	34
15	01-12-03-216-009	Intermediate ring (column)	03
16	02-04-03-068-816	Platform compl. with caps and mat	25
17	01-13-04-343-009	Platform mat	15
18	01-03-04-247-009	Cap for platform mat	08

12.01.06/Rei Seite 1 (2) 30-02-00-204a

